



ICT and Canada: The Future Is Here

> INNOVATION IN CANADA

Canadian firsts:

- The world's first personal computer
- JavaScript™ and the XML computer language
- The V-chip
- Key frame animation
- The world's first ultra-high-speed optical research network
- The world's first photonics-based, light-activated therapeutic drug

Investment plus talent equals success

Canada's universities produce more than 40 000 graduates a year in mathematics, engineering, and pure and applied sciences. Some 41 percent of Canada's information and communications technologies (ICT) industry workforce of 590 000 have university degrees. Many are at the forefront of their technology areas.

Canada's BlackBerry® Wireless Solution by **Research In Motion** revolutionized the ICT world. What's next? It's up to your imagination...

Canada is an acknowledged leader in wireless technology, biometrics, security technology, software, and multimedia and digital entertainment. Canada also has rapidly growing niche strengths in photonics, e-health technology, nanotechnology and artificial intelligence.

If you want to catch the next wave in innovation, Canada is the best place for ICT investment and research and development (R&D).

Certicom's made-in-Canada encryption technology provides the security that enables the world to transmit its data with confidence and confidentiality — opening new frontiers for global business.

Canadians make great partners

Some of the world's most prominent multinational enterprises are investing in Canadian ICT expertise.

IBM, Ericsson, Electronic Arts, Ubisoft, SAP, EDS, Motorola, Nokia, Intuit, Convergys and many others are either operating in Canada, or are working closely with Canadian partners through direct investment, partnerships, strategic alliances and joint ventures, subcontracting and R&D collaborations.

Canada is considered to be the best country in the G7 in which to do business over the next five years.
— Economist Intelligence Unit (2006–2010)

Canada's ICT community continues to grow as the number of world-class organizations fostering ICT innovation increases. Canada's receptive business environment provides companies with opportunities to create, develop and build new technologies by capitalizing on the many ICT advantages offered here.

A strong foundation for Canadian ICT success

> FAST FACTS

- There are 32 000 ICT firms operating in Canada.
- In 2005, ICT firms contributed CDN\$60.7 billion to Canada's gross domestic product (GDP) — 5.6 percent of total output.
- Between 1997 and 2005, ICT industries had an annual growth rate of 8 percent.

Canada's ICT advantage includes:

- **A competitive economy, with excellent fundamentals.** Canada was the first G7 nation to pull itself out of deficit and into surplus, with balanced or surplus budgets expected for the future.
- **Easy access to global and North American markets.** Canadian companies have assured entry to North American markets through the North American Free Trade Agreement (NAFTA). Canada and the U.S. have the world's largest trading partnership, with two-way trade amounting to CDN\$710 billion in 2005 — an average of CDN\$1.35 million per minute.

"Canada's cultural diversity and intellectual talent provided us with a perfect location to develop our products for a global marketplace."

– Yoichi Erikawa, Founder and Chief Advisor,
KOEI Co., Ltd.

- **A superior workforce.** Canadian workers are unrivalled for knowledge, education and skill levels, and our labour turnover rates are low. Among OECD countries, Canada has the highest percentage of individuals with college or university education.
- **First-class ICT infrastructure.** Canada has superb network and grid facilities, a commitment to Internet and broadband access, and great R&D collaboration with top Canadian universities. According to the *IMD World Competitiveness Yearbook 2005*, Canada's technological infrastructure is highly ranked, finishing first in the G7 for broadband usage.
- **ICT strength across the country.** From Vancouver, British Columbia, across the Prairies to urban hubs in central Canada, and on to St. John's, Newfoundland, Canada has many unique and cutting-edge companies.
- **Quality of life.** With a spectacular environment, a vast array of cultural amenities and universal health care, Canada's quality of life is unparalleled. Canada tops the G7 as the safest place to live, and, according to the *IMD World Competitiveness Yearbook 2005*, has the lowest cost of living and the best overall quality of life in the G7.

A cost-competitive business environment

2006 Competitive Alternatives: KPMG's Guide to International Business Costs is one of the most authoritative studies of international business competitiveness available. KPMG has determined that Canada is the most competitive location of all G7 countries, due largely to lower labour costs for scientific and technical personnel, and superior taxation treatment of R&D costs. According to the study, Canada's overall after-tax cost advantage over the U.S. was 5.5 percent.

> CANADA'S COST ADVANTAGES OVER THE U.S. FOR SPECIFIC BUSINESS OPERATIONS WITHIN THE ICT SECTOR ARE:

- R&D operations (electronic systems development and testing): 11.5 percent
- Advanced software development: 7 percent
- Web and multimedia content development: 6.2 percent
- Shared service centres (back office / call centre): 5.3 percent
- Electronics assembly: 3.4 percent
- Telecommunications manufacturing: 2.5 percent

Source: *2006 Competitive Alternatives: KPMG's Guide to International Business Costs*

Home to world-class research and development

Canada is committed to ICT research and development. R&D investment by the ICT sector represents a very impressive 39 percent of total business R&D expenditures in Canada. An investor setting up an R&D lab can demonstrate and test prototype products through CA*net 4, Canada's advanced research network, which connects to U.S. and global research networks.

Successful options for innovative R&D exist across the country, often in collaboration with federal and provincial organizations, programs and academic institutions — from establishing a core R&D lab in Canada to partnering with a Canadian company for R&D services, to connecting with a Canadian university, or participating in one of our centres of excellence.

> AN ALL-STAR LINEUP

- The National Research Council Canada (NRC) is our leading resource for R&D and technology-based innovation, and a valued industry partner in the ICT sector. The NRC's Canadian Photonics Fabrication Centre offers Canadian firms and researchers access to state-of-the-art prototyping equipment to develop leading-edge photonic devices. www.nrc.gc.ca
- The Communications Research Centre Canada (CRC), an agency of Industry Canada (IC), is one of the country's leading laboratories for R&D in advanced telecommunications. CRC's vision is one of national leadership in R&D on telecommunications and information technologies. Through its unique expertise and collaborative ways of doing business, CRC is responding to the federal government's goal to increase Canada's innovation capacity and to make information and communications technologies available to all Canadians. www.crc.ca
- CANARIE Inc. operates CA*net 4, Canada's ultra-high-speed optical research network that can be used to demonstrate and test prototype products over global research networks. www.canarie.ca
- Precarn Inc. has programs to support R&D collaboration between companies and Canadian universities on intelligent systems and robotics. www.precarn.ca

Opportunities for research collaboration are unlimited

- **Canadian Photonics Fabrication Centre** (<http://cpfc.nrc.gc.ca>)
- **National Institute for Nanotechnology** (<http://nint.nrc.gc.ca>)
- **Networks of Centres of Excellence** (www.nce.gc.ca)
- **Network for Emerging Wireless Technologies (NEWT)** (www.newt.trilabs.ca)
- **Telecom Applications Research Alliance (TARA)** (www.tara.ca)
- **International Institute of Telecommunications – Research** (www.iitelecom.com)
- **Perimeter Institute for Theoretical Physics** (www.perimeterinstitute.com)

Find out more about exciting Canadian ICT investment opportunities

Canada is a great place to do business, and now is the ideal time to invest. Discover what all the excitement is about. Then decide for yourself.

For further information, visit our website:

www.strategis.gc.ca/ICT

Come to Canada – discover the ICT advantage!